# Society Reports.

## AMERICAN NEUROLOGICAL ASSOCIATION.

(*Continued.*)

*Twentieth Annual Meeting held at the Cosmos Club, Washington, D. C., on May 30 and 31, June 1, 1894.*

Dr. WILLIAM A. HAMMOND read a paper on

## MERYCISM.

ABSTRACT.

He defined this condition as the functions of rumination and remastication in the human subject. Only about fifty cases have been reported. Several cases were referred to, among them that of the distinguished physiologist, Brown-Séquard, who had acquired it as a result of experiments performed upon himself. The case reported was that of a young man, whose mental condition was impaired and who was also the subject of merycism. No special treatment was undertaken against the merycism, but the patient was trephined with the purpose of improving his mental condition. There were no unusual features connected with the operation; but it was noticed that regurgitation did not occur with the meals he subsequently ate till on the fifth day, when there was a slight return. Eight days later a similar button was removed from the corresponding part of the left side of the skull. From that time (about six months ago) till the present there has been no regurgitation.

Whether the cure of the merycism in this case was directly due to the operations on the cranium or the result of the mental improvement is a question which it would bedifficult to answer.

## DISCUSSION.

Dr. KNAPP said that two cases had come to his knowledge, both in physicians, but one of them he knew of only by hearsay. The other man, now over thirty, had regurgitated his food from early childhood, and he did not know that he had anything very unusual the matter with him until he began some investigations upon the functions and diseases of the stomach. This man was not nervous, and was certainly not an idiot. He had done active work as a physician, and called himself in perfect health. He was something of an epicure and never suffered from indigestion. After a hearty meal the regurgitation was more marked. Food had been regurgitated, tasting as good as when first eaten, several hours after eating. If he attempted to check the regurgitation he sometimes had a slight feeling of fullness in the stomach.

Dr. FRANK R. FRY said that he wished to thank Dr. Hammond for his kindly mention of the paper of Dr. E. C. Runge, of St. Louis, on the same subject. Dr. Runge, in his case, had made a number of physiologico-chemical examinations which he thought were valuable.

Dr. J. H. LLOYD, said that these cases were forms of neuroses, and were types of hysterical vomiting. There was no gustatory satisfaction connected with any form of hysterical vomiting that he had seen. In some of these cases of hysterical vomiting the food does not appear to enter the stomach, but is rejected by a sort of spasm of the œsophagus. This has been called "Œsophagismus," and is apparently closely allied to this neurosis, which some have called "merycism."

THE PRESIDENT said that this would seem to be an affection common among physicians. A student friend of his had been affected in this way; had written an elaborate merograph on the subject. He was disgusted with the habit, and finally overcame it by the exercise of his will power.

Dr. W. A. HAMMOND said that when it was acquired it was almost invariably the result of over-eating and loading the œsophagus, or of fast eating.

Dr. WILLIAM BROWNING read a paper on

## LUMBAR PUNCTURE AS RECOMMENDED BY QUINCKE (See page 651).

### DISCUSSION.

Dr. CHARLES K. MILLS said that although the paper was interesting and reliable it did not convince him that the operation was desirable and useful.

Dr. C. L. DANA said that the author had not referred to one class of cases in which this method was applicable, viz., "wet brain," as found in so-called alcoholic meningitis. He had himself used the method three times in such cases. Two patients got well, and the other died. The patient who died was nearly moribund when the attempt at tapping was begun. In the adult the procedure was by no means sure or simple. In three out of five cases he had failed to withdraw any fluid. In two cases of œdema of the brain the fluid was successfully extracted. In one case he withdrew three ounces of fluid, but the operation did no good. He agreed with Dr. Mills as to the inutility of the operation so far as present experience went, but he would not characterize it as irrational. The removal of the fluid in pleuritic, pericardial and peritorical effusions was a benefit to the patient sometimes, and it might be in the case of cerebro-spinal effusion.

Dr. P. C. KNAPP read a paper on

## RECURRENT OCULO-MOTOR PARALYSIS.

### ABSTRACT.

A man of forty-one, with some nervous heredity, had had severe neuralgic pain over the left eye, with ptosis, external stabismus, and numbness of the face, a year before he came under observation. This lasted seven weeks. In December, 1892, one year later, he had intense pain in the left side of the head, with nausea and vomiting. There was complete paralysis of the left third nerve, with anæsthesia of the nose and cheek on the left side, and paræsthesia of the forehead. Photophobia was present. The anæsthetic region was extremely

tender on pressure, and there was increased discharge from the left nostril. After two months the paralysis began to diminish, and after four months it had almost wholly disappeared; but the sensory symptoms still continued in a lesser degree. Statistics were given of forty cases, and of ten other cases of a doubtful nature. In only six cases has there been complete recovery from the paralysis in the interval between the attacks, and in four more the pupil remained dilated. In seven cases there was at first complete recovery, but in the later intervals there was some paresis. Senator's division into periodical and periodically exacerbating cases hardly seemed warranted, and, although some of the cases resemble migraine, the affection in most cases is not at all like migraine. Three autopsies have shown lesions involving the nerve, and most cases are probably due to such lesions.

### DISCUSSION.

Dr. C. K. MILLS thought that the explanation of an organic lesion was the only correct one in these cases, and the question resolved itself into localizing the lesion. Whether the lesion was in the external portion of the nerve, or whether in the root fibres, was a matter of doubt. These cases could be explained by syphilitic infiltration of the brain substance, involving the ascending sensory branch of the fifth. Some of these cases, in which oculo-motor paralysis was present on one side, and hemi-anæsthesia on the other, were due to syphilitic disease involving the root fibres of the third and the meniscus. Such a lesion could occur at the base of the brain and partial recovery take place.

Dr. M. PRINCE, of Boston, remembered having had such a case at one time. He was strongly inclined to believe that the English views were wrong, and he was somewhat skeptical as to the clearing up of the paralysis. The autopsies showed peripheral lesions.

Dr. G. L. WALTON said that probably cases of various pathological basis had been grouped together under this head, thus aiding the confusion. Among them were undoubted cases of gross organic lesion. There were, however, probably some cases, notably those (classed by some as migraine) in which the process was perhaps allied to the monoplegias of severe hysteria, in which the change was vascular, perhaps amounting to a localized œdema. It seems not impossible that such recurring œdema at the cortex might sometimes cause these symptoms as well as at the base.

Dr. KNAPP said that there was no case of complete recovery from recurrent oculo-motor paralysis on record, although some cases had improved considerably. In his own case there was probably no syphilis, and syphilis had been absent in a number of the cases. There were cases of syphilitic paralysis which showed striking changes in the severity of the symptoms, but those had not been included. He knew of no case on record where there had been a complete paralysis of the third nerve from a cortical lesion; hence, any theory of a hysterical paralysis seemed to him untenable, especially as the autopsies all showed a distinct lesion of the nerve itself.

Dr C. L. DANA read a paper on

## CEREBRAL HEMORRHAGE: ITS CAUSES AND PREMONITORY SYMPTOMS.

### ABSTRACT.

Dr. C. L. DANA presented this paper based upon the study of 100 consecutive cases of apoplexy with hemiplegia, observed at his clinic at the Post-Graduate Hospital, and seventy-nine cases of apoplexy, with autopsy, observed in Bellevue Hospital; thirty of the latter came under his personal care and observation. Of 100 nonfatal cases, thirty-six were due to syphilis. The special characteristics of the attacks due to syphilis are that they occur in early life; they are often multiple in character, and the pathological condition underlying them is usually a thrombosis and softening. So far as his experience and records went cerebral hemorrhages are rarely repeated, and it seemed as if in many cases the rupture of an artery changed the vital conditions, as it certainly does the personal habits, so that the attack exercises a conservative influence upon the individual and actually tended to prolong life.

### DISCUSSION.

Dr. E. D. FISHER, of New York, said he had a statistical report of seventy-seven cases. Fifty-one had one attack; sixteen had two attacks; nine had three attacks, and one had six attacks. These patients were all living.

The duration of life of these patients was: those with one attack, three years; with two attacks, three and seven-eighths; after three attacks, still living—in other words, the average duration of life was eleven years. Where the attacks were repeated, they were usually syphilitic or thrombotic in character. In his statistics, the proportion was sixteen cases with two attacks. This was larger than that given by Dr. Dana. The average age at time of attack was forty-four and six-elevenths years. This showed the unreliability of statistics, for, out of these cases, there was one at seventy-five, two at seventy-seven, and two at eighty-one, which thus increased the average time of seizure disproportionately. The longest duration of life was twenty-two years, and the next longest fifteen years.

Dr. L. C. GRAY, of New York, said that he did not see how any statistics could be gathered about such a general subject as apoplexy, because an apoplexy in one locality had an entirely different complexion from an apoplexy in another. For instance, an apoplexy or hemorrhage into the region of the cortex was entirely different from an apoplexy into the nucleus of the pneumogastric or spinal accessory. And indeed, an apoplexy differed according to the region of the cortex in which it was found, for one in the frontal region differed entirely from one in the motor region. An attempt, therefore, to generalize upon apoplexies of the brain is just about as unscientific as to attempt to generalize upon apoplexies in general, and to assume that we can get statistics that are reliable by jumbling a hemorrhage into the brain with hemorrhage into the stomach, or liver, or kidneys, or spleen, or muscles. A hemorrhage by itself anywhere may be perfectly harmless, or, on the other hand, it may be instantly fatal, or midways between the two, it may be fatal in some instances and harmless in others, and to attempt a generalization from all these classes of facts is, in the nature of the task, impracticable.

Dr. LEONARD WEBER, of New York City, said that these statistics were valuable, but that they would be even more valuable if more of the cases had occurred in private practice.

Dr. WILLIAM A. HAMMOND said he was rather sorry to see apoplexy again regarded as a disease by itself instead of a symptom. The mere fact of one blood-vessel having burst did not make the others any more likely to do so. In fact, such an event was often protective.

Dr. WHARTON SINKLER said that his experience had led him to agree with Dr. Hammond. He had under observation a man who had had an attack of hemiplegia twenty-five years ago, and had never had a recurrence. He did not mean to say that he thought he was any better off for it, or that it had improved his habits or his cerebrations.

Dr. MORTON PRINCE, of Boston, said that he understood that one hundred of the cases had not been fatal; hence, we could not tell until they died how many attacks they might have.

Dr. C. L. DANA said he did not think it quite just to criticize his data, for he had not had time to read all of his paper. Some were cases of embolism, some of thrombosis, some of hemorrhage, and he had discussed them under the general head "Apoplexy." Practically, we often could not go further than this in our clinical diagnosis, and it, therefore, seemed to be a matter of practical importance to study them correctly.

Dr. WHARTON SINKLER presented a paper on

## A LESION OF THE THALAMUS (See page 664.)

### DISCUSSION.

Dr. C. K. MILLS remarked that the case was of interest in connection with the question of vasotonic centres in the thalamus.

## A NEUROLOGIST'S PERCUSSION HAMMER.

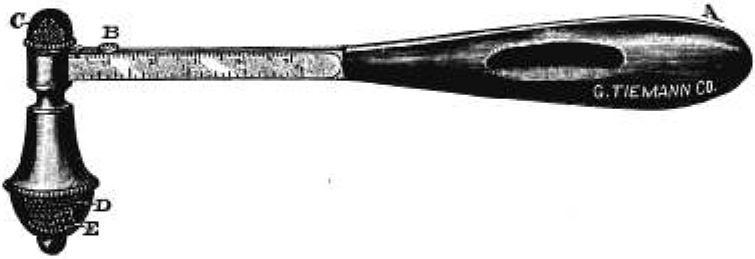
By WILLIAM C. KRAUSS, Buffalo, N. Y.

### ABSTRACT.

The neurologist requires, as a rule, but very few instruments in conducting an examination of the nervous system, and of such the percussion hammer is, perhaps, most often employed. To make the examination thorough and detailed, an office outfit is indispensable, but in the majority of cases the simplest means are used to ascertain the condition of the sensory and motor conductors, the reflexes, strength of the hands, legs, etc.

Having had occasion to make constant use of the hammer in my private and hospital practice, I have devised some improvements and modifications which widen the field of its usefulness, thus making it more serviceable to those engaged in neurological research.

The hammer is constructed after the French pattern having a heavy metallic head fixed to a flattened oval handle seventeen centimetres long. As a hammer it may be used to examine the tendon and muscular reflexes, to percuss the head spine, superficial nerves, etc. The handle (a) being of hard rubber becomes warm on friction, while the head being of metal remains cold, thus offering the means of examining the sense of heat and the sense of cold, fulfilling the requirements of an thermo-æsthesiometer.



The cap (c) when removed discloses a triangular spear, head about one-half centimetre long, while at the other end of the hammer head is the rounded rubber points—the two ends furnishing, therefore, a sharp and a dull point for examining for anæsthesia or hyperæsthesia.

The advantages of this arrangement over the ordinary way for examining the sensibility of a patient—*i. e.*, with a pin or needle are, that the patient is unaware of the intent of the examiner and does not become hypersensitive as when a pin is introduced; the spear point is not liable to penetrate through the epidermis; the examiner can strike or touch the skin with nearly uniform force, and, knowing the sharpness of the point, can better judge whether abnormalities of sensation are present or not.

The spear is divisible into two portions, one securely fixed upon the hammer head, the other movable upon a metallic slide upon which is engraved the metric and

English scales. This arrangement furnishes an excellent æsthesiometer and is as accurate and convenient as any on the market. Replacing the cap (c) and removing the cap (e) a camel's hair brush is exposed, gixing a soft surface, while the metallic cap (c) gives a hard surface. The hammer is conveniently carried in the pocket, and has served me with much satisfaction.

# CIRCUMSCRIBED SOFTENING OF THE PONS, AND IN THE SAME CASE, OF THE INTERNAL CAPSULE, CAUDATUM, AND LENTICULA.

By CHARLES K. MILLS, M.D., and JOHN ZINNER, M.D.

## ABSTRACT.

This case presented two limited lesions of unusual interest—one in the pons, and a second involving the internal capsule, and a small segment of the caudatum and lenticula. The week before the death of the patient, the pontile lesion was accurately located in a discussion of the case in a clinical lecture delivered in the area of the Philadelphia Hospital. The patient, a woman, 42 years old, had a previous history of alcoholism, and of acute articular rheumatism. A presystolic mitral and a systolic aortic murmur could be heard. For eight weeks previous to her admission, she had had almost constant headache, worse at night; and on the day before was attacked without loss of consciousness, with vertigo, double vision, and paresis of the right arm and leg. Examination showed slight impairment of mental action, marked somnolency, and imperfect articulation. At rest, the right eye turned strongly to the right, while the left was not deviated. Both eyes could not be turned together to the left. The lateral movement of the left eye to the right was also impaired, and slight nystagmus of both eyes was present. The lids of the left eye could not be brought fully together. Right facial paresis was present, but the tongue was not deflected. Tendon and muscle phenomena were much exaggerated in the paretic limbs. Anæsthesia could not be discovered in any portion of the body. For a few days, the patient improved considerably. The loss of power in the leg

largely disappeared, and paresis of the face muscles was only noticeable on smiling, but she remained totally unable to turn the eyes beyond the median line to the left. She slept, or seemed to sleep, much during this time. Her temperature slightly fluctuated, slightly below normal.

About eleven days after admission, she had a second apoplectiform attack. She was now totally unable to articulate, but understood what was said. She was also unable to expectorate, and there was interference with swallowing. She fell into a stuporous condition, with eyes fixed in the mid-position; conjunctivæ and other reflexes obtounded; right pupil smaller than left; face distinctly drawn to the right, and involuntary discharges. She died between four and five days after this second attack.

A thorough and careful autopsy was made by Drs. Guiteras and Mills; and revealed a circumscribed softening with hemorrhage infiltration. The lesion reached to within 1.5 mm. of the ventral surface of the pons; laterally extending to the raphe, and about the middle of the pons slightly across the nasal line. The area of the softening became smaller and more deeply situated as it approached the post oblongata, which it almost, but not quite reached. A transection through the horizontal furrow, separating the pons and post oblongata showed perfectly normal structure.

The second lesion was revealed by a vertical transection of the right basal ganglia and capsule. The widest portion of the lesion corresponded to the plane of the cephalic extremity of the thalamus. It was about seventeen mm. in its antero-posterior extent. The heart presented valvular lesions; and the kidneys, spleen and lungs presented pathological conditions.

The pontile lesion in this case was of unusual interest in the study of the nuclei and root fibres of the facial, abducens (external oculomotor), and third nerves (common oculomotor); and particularly with regard to connections of the facial and abducens. The lesion probably involved the root fibres of the abducens and the fibres connecting it with the facial fibres or nucleus. The position of the lesion was such as not by any possibility to involve the cell nests of these nerves. The lesion involved the crustal portion of the pons, including a portion of the pyramidal tracts, and the deep transverse fibres. The lemniscus, central tegmental tract and the structures of the tegmentum in general, probably escaped. The case was also of interest with reference to the question of the partial decussation of the facial root fibres. A microscopical report on the case will eventually be made.

The lesion of the internal capsule was localized near the genu, probably involving the speech and the geniculate tracts; the latter, as is well known, including the cortico-bulbar bundles for the interior facial, motor, trigeminal and hypoglossal nuclei. It is probable that the attack of embolism which resulted in this area of softening took place on January 22d and 23d, when the patient's condition became much worse, and was especially marked by impairment of articulation eventually to the point of complete loss; by inability to expectorate or swallow her saliva; by drawing of the face to the right, with sputtering and drooling, and marked nasal and buccal stertor. Some at least of these symptoms were probably due to the lesion of the internal capsule and striata.

Drs. GUY HINSDALE, and J. MADISON TAYLOR, of Philadelphia, read a paper on

## CROSSED KNEE-JERK.

### ABSTRACT.

This paper is based on studies of over one thousand cases of nervous disease observed at the Infirmary in Philadelphia, the Institutions for Feeble-Minded at Elwyn, Pa., and Vineland, N. J. In using the term "crossed knee-jerk," it is meant that the patella tendon being struck, the opposite leg is instantly made to approach its fellow. Hence the phrase "in knee-jerk," or "contralateral knee-jerk," may be used to describe this action. The movement observed in the limb opposite to that in which the patella tendon is struck is not an extension of the leg so much as an adduction of the thigh (vastus internus and crureus). The best attitude for eliciting this movement is not that which permits of the freest knee-jerk, such as sitting on the edge of a table, or at least with the legs hanging down from a chair sufficiently high. It demands rather more ease of lateral motion of the thigh. This is accomplished very well by seating the subject comfortably in a chair with

the body erect and the knees ten or twelve inches apart, at a rather obtuse angle, the feet being advanced a few inches.

The phenomenon is observed in a small proportion of normal persons, and in thirty or forty per cent. of the cases coming to a clinic for nervous disease. It is observed in a large majority of spastic cases, the inward excursus amounting in some cases to one-half inch. It is elicited in favorable cases after suspending the subject and observing the adduction of the thigh on tapping the patella tendon or, as in one case observed, tapping the tendo-Achilles. This experiment is believed to rule out the possibility of the crossed knee-jerk, being due to a communicated blow or jar acting mechanically. In all locomotor ataxics with absent knee-jerk, the crossed knee-jerk is also absent. Crossed knee-jerk is reinforceable and is held to be a true reflex.

### DISCUSSION.

Dr. G. L. WALTON, of Boston, spoke of the importance of studying anomalous reflexes in general. We have not exhausted the paths in which the reflexes may be deviated. Dr. Walton had been surprised to find (in a case of broken back) not only that striking of the thigh produced flexion of the toes, but that striking of various parts of the legs produced the same result.

Dr. W. J. MORTON said that about two weeks ago, in treating a right sciatica electrically, using sixty vibrations per minute, with one electrode upon the abdomen and the other within the vagina, he has found that the left shoulder group of muscles vibrated with every interruption of the current.

Dr. G. W. JACOBY remarked that, judging from the description of the phenomenon here given, it seemed as though we were dealing with a radiated reflex, contraction of a muscle or group of muscles quite distant from the seat of sensory excitation. The idea of the authors which made the cerebral cortex an integral part of the reflex arc, would explain many of these phenomena. The most curious, and perhaps, practically, the most valuable reflex of this kind is the one which the speaker had discovered and demonstrated to the association three years ago, and which consists in producing a contraction in the levator or quadratus menti, by making a cathodic closure with eight M. A. of current over the area of skin supplied by the radialis superficialis. This is a true physiological reflex, occcurs in over sixty per cent. of normal individuals, and as yet furnishes the only objective means of electrically examining any sensory nerve in the human body. No doubt, many such radiated reflexes, of which that described by the authors is another example, will in time be discovered.

Dr. C. K. MILLS said it seemed to him that the best explanation of this phenomena, was to be found in the direction indicated in the President's address of yesterday, namely, by a study of the distribution of the cells and fibres in the spinal cord, and their relation to other parts of the nervous system.

The PRESIDENT said he considered the title of the paper rather unfortunate, as he was of the opinion that the term "knee-jerk" should be restricted to an extension movement of the leg. This was a contra-lateral contraction. These same contractions had been described by several authors in connection with other troubles. In *enurosis nocturna*, these same symptoms were elicited. It was doubtful from the report whether this really was a reflex contraction.

**Descending Fibres of the Posterior Roots.**—Dr. Marineses (*La Médicine Moderné*, June 13, 1894), continuing Ramon y Cajol's researches, found that the fibres of the posterior roots after entering the cord divide themselves into an ascending and a descending tract. After cutting the posterior root of young cats, within the vertebral canal, at the second cervical root, M. observed a narrow area of degeneration in the cord which descended to the level of the third, and disappeared at the fourth cervical root. He considers these to be commissural fibres. R. K. M.